Product data sheet
Characteristics

ABL8REM24030
regulated power supply, Phaseo, 100 to 240 V, 24 V, 3 A

Product availability: Stock - Normally stocked in distribution facility

Main

Range of product	Phaseo
Product or component type	Power supply
Power supply type	Regulated switch mode
Input voltage	100...240 V AC phase to phase L1-L2 100...240 V AC single phase N-L1 110...220 V DC
Output voltage	24 V DC
Rated power in W	72 W
Input protection type	Integrated fuse (not interchangeable)
Power supply output current	3 A
Output protection type	Against overload 1.1 x In Against overvoltage tripping if U > 1.5 x Un Against short-circuits automatic reset Against undervoltage tripping if U < 0.8 x Un
Ambient air temperature for operation	32…122 °F (0…50 °C) without) 122…140 °F (50…60 °C) with derating factor)

Complementary

Input voltage limits	85...264 V 100...250 V
Network frequency	47...63 Hz
Inrush current	30 A
Cos phi	0.65
Efficiency	85 %
Output voltage limits	100...120 % adjustable
Power dissipation in W	12.7 W
Current consumption	0.83 A 240 V 1.46 A 100 V
Line and load regulation	+/- 3 %
Holding time	>= 10 ms 100 V >= 10 ms 240 V
Connections - terminals	Input connection screw type terminals 2 x 0.14...2 x 2.5 mm² AWG 26...AWG 14 Input ground connection screw type terminals 1 x 0.14...1 x 2.5 mm² AWG 26...AWG 14 Output connection screw type terminals 2 x 0.14...2 x 2.5 mm² AWG 26...AWG 14 Output ground connection screw type terminals 1 x 0.14...1 x 2.5 mm² AWG 26...AWG 14
Marking	CE
Mounting support	35 x 15 mm symmetrical DIN rail 35 x 7.5 mm symmetrical DIN rail 75 x 7.5 mm symmetrical DIN rail
Operating position	Vertical
Operating altitude	6561.68 ft (2000 m)
Output coupling	Parallel Series

Name of test	Electrostatic discharges EN/IEC 61000-4-2 Induced electromagnetic field EN/IEC 61000-4-6 Primary outage IEC 61000-4-11 Radiated electromagnetic field EN/IEC 61000-4-3 Rapid transient IEC 61000-4-4 Surge EN/IEC 61000-4-5 Emission EN 50081-1 Conducted/Radiated emissions EN 55011 Conducted/radiated emissions EN 55022 class B
Status LED	Output voltage 1 LED green) Input voltage 1 LED orange)
Depth	4.72 in (120 mm)
Height	4.72 in (120 mm)
Width	1.06 in (27 mm)
Net weight	1.15 lb(US) (0.52 kg)

Environment

MTBF reliability	110 V with MIL-HDBK-217F 220 V with MIL-HDBK-217F
Product certifications	CSA 22-2 No 950 EAC RCM KC UL
Standards	UL 508 CSA C22.2 No 60950-1
Environmental characteristic	EMC EN 50081-1 EMC EN 50082-2 EMC EN 55024 Safety EN/IEC 60950 Safety SELV
IP degree of protection	IP20 EN/IEC 60529
Ambient air temperature for storage	-13…158 °F (-25…70 °C)
Relative humidity	0…95 % without condensation or dripping water
Overvoltage category	Class II IEC 60664-1
Dielectric strength	3000 V between input and ground 3000 V between input and output 500 V between output and ground 500 V between outputs

Ordering and shipping details

Category	22525 - ABL8 AND ABL7 POWER SUPPLIE
Discount Schedule	CP12
GTIN	00785901616849
Package weight(Lbs)	0.56 kg (1.24 lb(US))
Returnability	Yes
Country of origin	CN

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

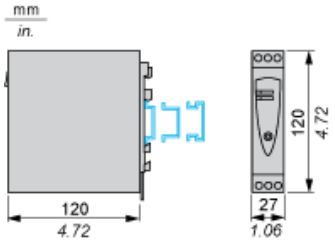
Contractual warranty

Warranty	18 months

Regulated Switch Mode Power Supply

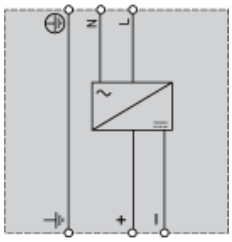
Dimensions and Mounting

Mounting on a 35 mm/1.37 in. or 75 mm/2.95 in. Rail



Regulated Switch Mode Power Supply

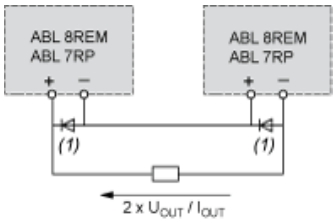
Internal Wiring Diagram



Regulated Switch Mode Power Supplies

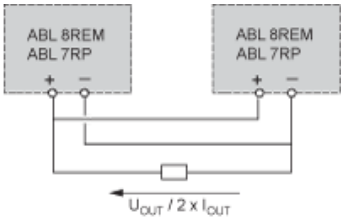
Series or Parallel Connection

Series Connection



(1) Two Shottky diodes Imin = power supply In and Vmin = 50 V

Parallel Connection



Family	Series	Parallel
ABL 8REM/7RP	2 products max.	2 products max.

NOTE: Series or parallel connection is only recommended for products with identical references.

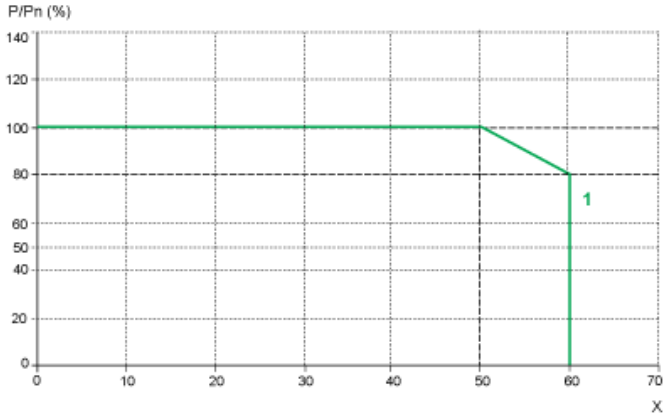
Regulated Switch Mode Power Supplies

Derating

The ambient temperature is a determining factor that limits the power an electronic power supply can deliver continuously. If the temperature around the electronic components is too high, their life will be significantly reduced.

The nominal ambient temperature for the Optimum range of Phaseo power supplies is 50 °C. Above this temperature, derating is necessary up to a maximum temperature of 60 °C.

The graph below shows the power as a percentage of the nominal power that the power supply can deliver continuously, depending on the ambient temperature.



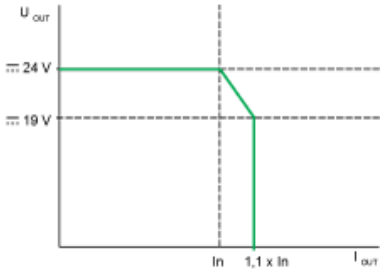
X Maximum operating temperature (°C)
(1) ABL 8REM, ABL 7RP mounted vertically

Derating should be considered in extreme operating conditions:

- Intensive operation (output current permanently close to the nominal current, combined with a high ambient temperature)
- Output voltage set above 24 Vdc (to compensate for line voltage drops, for example)
- Parallel connection to increase the total power

Regulated Switch Mode Power Supply

Load Limit



Regulated Switch Mode Power Supply

Temporary Overloads